

## IN THE CLAIMS

Please change the claims to read as shown below.

Change to:

1 - 27. (cancelled without prejudice)

28. (currently amended) An entity context apparatus, comprising:

a plurality of entity related systems and databases,  
means for preparing data from said systems and databases for use in processing,  
means for developing an complete entity context using at least a portion of said data,  
means for context-based data and information storage, and  
means for context distribution

where a complete entity context identifies each of the one or more aspects of a context that have a tangible impact on a behavior of an entity for each of two or more entity function measures, and

where a complete entity context includes different aspects of context selected from the group consisting element context, resource context, factor context, reference context, measure context, relationship context, transaction context, lexical context, temporal context and combinations thereof.

29. (currently amended) The apparatus of claim 28 that further comprises means for applying all or part of an complete entity context to support useful activities selected from the group consisting of completing actions, improving entity performance, managing entity performance, responding to events, supporting entity performance, analyzing the impact of user specified changes on entity function measure performance, capturing entity related knowledge from one or more subject matter experts, collaborating with others to refine entity knowledge, customizing any combination of products, services and information for the entity, developing programs for entity related devices, developing programs for bots to support entity performance, developing new entity related software programs, developing an entity ontology, displaying knowledge about entity performance, educating users, managers and collaborators about the entity in an interactive manner, establishing priorities for entity actions and commitments, establishing expected performance levels for the entity, exchanging any combination of resources, elements, commitments, data and information with one or more other entities in an automated fashion, forecasting future values of entity

related variables, identifying metrics and rules for monitoring entity performance, identifying changes that will optimize entity performance on one or more function measures, identifying the valid context space for entity analyses, identifying the data and information that is most relevant to the entity, identifying entity preferences, loading the data and information that is most relevant to the entity into a cache, optimize information technology support of entity performance, providing a true natural language interface for entity related software, quantifying risks to entity performance, quantifying the impact of surprises on entity performance, reviewing entity performance using user defined measures, regulatory measures and combinations thereof, searching for data in context, searching for information in context, searching for knowledge in context, simulating entity performance, underwriting entity related securities and combinations thereof.

30. (previously presented) The apparatus of claim 28 where an entity is selected from a group of domains consisting of political, habitat, intangibles, interpersonal, market, organization, biology, cellular, organism, protein, chemistry, geology, physics, space, tangible goods, water, weather and combinations thereof.

31. (previously presented) The apparatus of claim 28 where an entity is a separate entity, a combination of two or more entities or a multi-entity system.

32. (previously presented) The apparatus of claim 28 where an entity is a member of one or more groups selected from the group consisting of voter, precinct, caucus, city, county, state/province, regional, national, multi-national, global, household, neighborhood, community, city, region, brand, expectations, ideas, ideology, knowledge, law, money, right, relationship, service, individual, nuclear family, extended family, clan, ethnic group, organization, multi-organization, industry, market, economy, team, group, department, division, company, organization species, genus, family, order, class, phylum, kingdom, macromolecular complexes, protein, rna, dna, x-ylation, organelles, cells, structures, organs, organic systems, organism, monomer, dimer, large oligomer, aggregate, particle, molecules, compounds, chemicals, catalysts, minerals, sediment, rock, landform, plate, continent, planet, quark, particle zoo, protons, neutrons, electrons, atoms, molecules, dark matter, asteroids, comets, planets, stars, solar system, galaxy, universe, compounds, minerals, components, subassemblies, assemblies, subsystems, goods, systems pond, lake, bay, sea, ocean, creek, stream, river, current, atmosphere, clouds, lightning, precipitation, storm, wind and combinations thereof.

33. (currently amended) The apparatus of claim 28 where preparing data for use in processing further comprises:

developing a common entity specific configuration for organizing data selected from the group consisting of schema, ontology and combinations thereof, and  
converting data to a common entity specific schema and storing said data in accordance with said schema, converting data to a common entity specific ontology and storing said data in accordance with said ontology or a combination thereof.

34. (previously presented) The apparatus of claim 28 where data are aggregated from the group of consisting of organization systems, personal systems, bio medical systems, scientific systems, devices and combinations thereof.

35. (previously presented) The apparatus of claim 28 that is supported by computer hardware from the group consisting of a computer, a cluster, a plurality of computers connected via a network, one or more virtual computers, one or more blade servers, a plurality of computers connected via a grid, a device and combinations thereof.

36. (previously presented) The apparatus of claim 28 that further comprises support for context development, context storage and context distribution for a collection of entities or a population of entities.

37. (currently amended) A computer readable medium having sequences of instructions stored therein, which when executed cause the processors in a plurality of computers that have been connected via a network to perform an entity context method, comprising:

aggregating data from a plurality of entity related systems,  
developing ~~one or more~~ a complete entity contexts using at least a portion of said data where an complete entity context includes one or more different aspects of context selected from the group consisting element context, resource context, factor context, reference context, measure context, relationship context, transaction context, lexical context and combinations thereof and where a complete entity context identifies each of the one or more aspects of a context that have a tangible impact on a behavior of an entity for each of two or more entity function measures, and  
using ~~one or more~~ a complete entity contexts to support useful activities selected from the group consisting of completing actions, improving entity performance, managing entity

performance, responding to events, supporting entity performance, analyzing the impact of user specified changes on entity function measure performance, capturing entity related knowledge from one or more subject matter experts, collaborating with others to refine entity knowledge, customizing any combination of products, services and information for the entity, developing programs for entity related devices, developing programs for bots to support entity performance, developing new entity related software programs, developing an entity ontology, displaying knowledge about entity performance, educating users, managers and collaborators about the entity in an interactive manner, establishing priorities for entity actions and commitments, establishing expected performance levels for the entity, exchanging any combination of resources, elements, commitments, data and information with one or more other entities in an automated fashion, forecasting future values of entity related variables, identifying metrics and rules for monitoring entity performance, identifying changes that will optimize entity performance on one or more function measures, identifying the valid context space for entity analyses, identifying the data and information that is most relevant to the entity, identifying entity preferences, loading the data and information that is most relevant to the entity into a cache, optimize information technology support of entity performance, providing a true natural language interface for entity related software, quantifying risks to entity performance, quantifying the impact of surprises on entity performance, reviewing entity performance using user defined measures, regulatory measures and combinations thereof, searching for data in context, searching for information in context, searching for knowledge in context, simulating entity performance, underwriting entity related securities and combinations thereof.

38. (previously presented) The computer readable medium of claim 37 where each of one or more aspects of context are developed in an automated fashion by learning from the data.

39. (currently amended) The computer readable medium of claim 37, ~~where each of one or more entity contexts is defined by a relationship from the group consisting of being a context element having impact on one or more entities, being a context element having impact on one or more entity types, being a context element having impact on one or more events, being a context element having impact on one or more actions, being a context element having impact on one or more other elements, being a factor having impact on one or more entities, being a factor having impact on one or more entity types, being a factor having impact on one or more events, being a factor having impact on one or more actions, being a~~

~~factor having impact on one or more other elements, measure impact, being a resource having impact on one or more entities, being a resource having impact on one or more entity types, being a resource having impact on one or more events, being a resource having impact on one or more actions, being a resource having impact on one or more elements, reference frame position and combinations thereof wherein each of one or entity function measures further comprise a measure selected from the group consisting of a temporal measure, a transaction measure, a financial measure, a physical measure, a satisfaction measure and combinations thereof.~~

40. (previously presented) The computer readable medium of claim 37 where an entity is a separate entity, a collaboration between two or more entities or a multi-entity system.

41. (previously presented) The computer readable medium of claim 37 where an entity is a member of one or more groups selected from the group consisting of voter, precinct, caucus, city, county, state/province, regional, national, multi-national, global, household, neighborhood, community, city, region, brand, expectations, ideas, ideology, knowledge, law, money, right, relationship, service, individual, nuclear family, extended family, clan, ethnic group, organization, multi-organization, industry, market, economy, team, group, department, division, company, organization species, genus, family, order, class, phylum, kingdom, macromolecular complexes, protein, rna, dna, x-ylation, organelles, cells, structures, organs, organic systems, organism, monomer, dimer, large oligomer, aggregate, particle, molecules, compounds, chemicals, catalysts, minerals, sediment, rock, landform, plate, continent, planet, quark, particle zoo, protons, neutrons, electrons, atoms, molecules, dark matter, asteroids, comets, planets, stars, solar system, galaxy, universe, compounds, minerals, components, subassemblies, assemblies, subsystems, goods, systems pond, lake, bay, sea, ocean, creek, stream, river, current, atmosphere, clouds, lightning, precipitation, storm, wind and combinations thereof.

42. (currently amended) The computer readable medium of claim 37 where ~~one or more entity contexts are~~ a complete entity context is developed by a series of models selected from the group consisting of neural network; regression, generalized additive; support vector method, entropy minimization, generalized autoregressive conditional heteroskedasticity, wavelets, Markov, Viterbi, relevance vector method, Ornstein - Uhlenbeck, Bayesian, kriging, multivalent, multivariate adaptive regression splines, swarm, probabilistic – relational, power law, fractal, data envelopment analysis, path analysis and combinations thereof.

43. (currently amended) The computer readable medium of claim 37 where ~~each of one or more entity contexts~~ a complete entity context includes attributes from the group consisting of the definition of one or more entity functions, the relative importance of the one or more entity functions, one or more entity function measures, the identity and description of current, past and future entity actions, the identity and description of elements that support the completion of entity actions, the identity and description of resources consumed during the completion of entity actions, the identity and description of environmental factors that affect the completion of entity actions, the interrelationship between elements, factors and resources, the relationship between elements, factors, resources, entity actions and entity function measure performance and combinations thereof.

44. (currently amended) The computer readable medium of claim 37 where ~~each of one or more entity contexts~~ a complete entity context is developed in an automated fashion by learning from the data.

45. (previously presented) The computer readable medium of claim 37 where the method further comprises identifying a valid context space for each entity context.

46. (currently amended) A search method comprising:  
aggregating data from a plurality of entity related systems,  
develop one or more entity contexts for an individual entity and for a group of individual entities using at least a portion of said data,  
identifying a combination of data and information that is relevant to one or more layers of context for an entity selected from the group consisting of the individual entity, the group entity and combinations thereof using said entity contexts, and  
displaying the results in order of relevance  
where an entity context further comprises a relationship context layer and a plurality of context layers selected from the group consisting an element context layer, a resource context layer, a factor context layer, a reference context layer, a measure context layer, a relationship context layer, a transaction context layer, a lexical context layer and combinations thereof, and  
where an entity context identifies one or more aspects of a context that have a tangible impact on a behavior of an entity.

47. (previously presented) The method of claim 46 that further comprises:  
completing a transaction in an automated fashion where a price for said transaction is a function of an entity context.
48. (previously presented) The method of claim 46 wherein a measure context layer provides information that supports an identification of data and information relevance that is a function of its value to an entity.
49. (previously presented) The method of claim 46 wherein each entity context layer of a plurality of context layers is developed in automated fashion by learning from the data.
50. (previously presented) The method of claim 46 that has a context quotient of 200.
51. (currently amended) A context distribution system, comprising:  
a device with a processor having circuitry to execute instructions; a storage device available to each processor with sequences of instructions stored therein, which when executed cause the processor to:  
aggregate data from a plurality of entity related systems,  
develop one or more entity contexts using at least a portion of said data where an entity context includes a reference context and one or more different aspects of context selected from the group consisting element context, resource context, factor context, ~~reference context~~, measure context, relationship context, transaction context, lexical context and combinations thereof, and  
distribute one or more of the entity contexts in an automated fashion  
where an entity context identifies one or more aspects of a context that have a tangible impact on a behavior of an entity.
52. (previously presented) The context distribution system of claim 51 that supports distribution methods selected from the group consisting of operating system layer propagation, device synchronization, device synchronization and replication, packet distribution, natural language interface and combinations thereof.
53. (previously presented) The context distribution system of claim 51 that distributes one or more aspects of context in separate layers where said layers further comprise operating system layers, middleware layers or web service capabilities.

54. (new) A context search method, comprising

Aggregating data related to an entity in accordance with a common schema,

Analyzing at least a portion of said data as required to identify an entity context and one or more priorities for said entity given said context,

Identifying data, information and knowledge that is relevant to said entity context, and

Presenting at least one of relevant data, relevant information or relevant knowledge after sorting said data, information or knowledge on the basis of entity context relevancy and priorities

where an entity context identifies one or more aspects of a context that have a tangible impact on a behavior of an entity, and

where data related to an entity are obtained from a world wide web and the group consisting of a plurality of entity related narrow system databases, one or more external databases, an Intranet, a direct input and combinations thereof.

55. (new) The method of claim 54, wherein an entity context further comprises an element context and one or more aspects of context selected from the group consisting of resource context, factor context, reference context, measure context, relationship context, transaction context, lexical context, temporal context and combinations thereof

where a reference context further comprises information that defines a relationship of one or more aspects of context selected from the group consisting element context, resource context, factor context, measure context, relationship context, transaction context and combinations thereof to one or more coordinate systems over time.

56. (new) The method of claim 54, wherein one or more priorities are defined by one or more mission measures.

57. (new) The method of claim 56, wherein one or more mission measures further comprise any quantifiable measure.

58. (new) The method of claim 56, wherein one or more mission measures further comprise measures selected from the group consisting of a temporal measure, a transaction measure, a financial measure, a physical measure, a satisfaction measure and combinations thereof.



59. (new) The method of claim 54, wherein an entity context is developed by learning from the data.

60. (new) A program storage device readable by machine, tangibly embodying a program of instructions executable by a machine to perform method steps for performing a context search method, the method steps comprising:

Aggregating data related to an entity in accordance with a common schema,

Analyzing at least a portion of said data as required to identify an entity context and one or more priorities for said entity given said context,

Identifying data, information and knowledge that is relevant to said entity context, and

Presenting at least one of relevant data, relevant information or relevant knowledge after sorting said data, information or knowledge on the basis of entity context relevancy and priorities

where an entity context identifies one or more aspects of a context that have a tangible impact on a behavior of an entity, and

where an entity context further comprises a measure context and one or more aspects of context selected from the group consisting of resource context, factor context, element context, reference context, relationship context, transaction context, lexical context, temporal context and combinations thereof.

61. (new) The program storage device of claim 60, wherein one or more priorities are defined by one or more mission measures.

62. (new) The program storage device of claim 61, wherein one or more mission measures further comprise any quantifiable measure selected from the group consisting of a transaction measure, a financial measure, a physical measure, a satisfaction measure and combinations thereof.

63. (new) The program storage device of claim 60, wherein data related to an entity are obtained from the group consisting of a plurality of entity related narrow system databases, one or more external databases, a world wide web, a direct input and combinations thereof.

64. (new) The program storage device of claim 60, wherein one or more priorities for an entity are identified in an automated manner by learning from the data.

65. (new) The program storage device of claim 60, wherein an entity is selected from a group of domains consisting of political, habitat, intangibles, interpersonal, market, organization, biology, cellular, organism, protein, chemistry, geology, physics, space, tangible goods, water, weather and combinations thereof.

66. (new) A context search system comprising:

networked computers each with a processor having circuitry to execute instructions; a storage device available to each processor with sequences of instructions stored therein, which when executed cause the processors to:

- (a) aggregate data related to an entity in format suitable for processing,
- (b) analyze at least a portion of said data as required to identify an entity context and one or more priorities for said entity given said context,
- (c) identify data, information and knowledge that is relevant to said entity context, and
- (d) presenting at least one of relevant data, relevant information or relevant knowledge after it is sorted on the basis of entity context relevancy and priorities

where an entity context identifies each of the one or more aspects of a context that have a tangible impact on a behavior of an entity,

where one or more priorities for the entity are identified by said entity, and

where an entity context further comprises a factor context and one or more aspects of context selected from the group consisting of measure context, resource context, reference context, element context, relationship context, transaction context, lexical context, temporal context and combinations thereof where a measure context further identifies and quantifies an impact of actions, events, elements, factors and resources on each of a plurality of entity function measures by time period.

67. (new) The system of claim 66, wherein one or more priorities are defined by one or more entity function measures where said function measures further comprise a temporal measure and one or more measures selected from the group consisting of a transaction measure, a financial measure, a physical measure, a satisfaction measure and combinations thereof.

68. (new) The system of claim 66, wherein identifying data, information or knowledge that is relevant to an entity context further comprises the development of one or more indices for a measure context and for aspects of context selected from the group consisting of element context, factor context, reference context, relationship context, transaction context, lexical context, temporal context, resource context and combinations thereof.

69. (new) The program storage device of claim 60, wherein data related to an entity are obtained from the group consisting of a one or more entity related narrow system databases, one or more external databases, a world wide web, a direct input and combinations thereof.

70. (new) An entity knowledge method, comprising

Preparing a plurality of entity related data for use in processing,

Analyzing at least a portion of said data as required to develop an entity knowledge, and

Using said knowledge to complete useful activities selected from the group consisting of identifying the data, information and knowledge that is most relevant to the entity, identifying entity preferences, loading the data and information that is most relevant to the entity into a cache, optimize information technology support of entity performance, providing a true natural language interface for entity related software and combinations thereof where an entity knowledge further comprises a model of entity behavior that supports the identification of an optimal set of actions for a given context.